

CLAIMS

I claim:

1. A non-aqueous suspension, comprising:
  - (a) one or more water-soluble polymers;
  - (b) polyalkylene glycol; and
  - (c) a suspension stabilizer comprising an hydrogenated castor oil or wax.
2. The suspension according to claim 1 wherein the water-soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.
3. The suspension according to claim 1 wherein the water-soluble polymer is xanthan gum.
4. The suspension according to claim 1 wherein the water-soluble polymer is guar gum.
5. The suspension according to claim 1 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.
6. The suspension according to claim 1 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

7. The suspension according to claim 1 wherein the polyalkylene glycol includes a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

8. The suspension according to claim 7 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

9. The suspension according to claim 1 wherein the polyalkylene glycol has a molecular weight of less than 1000.

10. The suspension according to claim 1 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

11. A non-aqueous suspension, comprising:

- (a) about 0.1 to about 75 percent by weight water-soluble polymer;
- (b) about 20 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor oil or wax.

12. The suspension according to claim 11 wherein the water-soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl

cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

13. The suspension according to claim 11 wherein the water-soluble polymer is xanthan gum.
14. The suspension according to claim 11 wherein the water-soluble polymer is guar gum.
15. The suspension according to claim 11 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.
16. The suspension according to claim 11 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.
17. The suspension according to claim 11 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.
18. The suspension according to claim 17 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.
19. The suspension according to claim 11 wherein the polyalkylene glycol has a molecular weight of less than 1000.
20. The suspension according to claim 11 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants,

demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

21. A non-aqueous suspension, comprising:

- (a) about 0.1 to about 40.0 percent by weight xanthan gum;
- (b) about 55 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor wax.

22. The suspension according to claim 21 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

23. The suspension according to claim 21 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

24. The suspension according to claim 23 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

25. The suspension according to claim 21 wherein the polyalkylene glycol has a molecular weight of less than 1000.

26. The suspension according to claim 21 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

27. A non-aqueous suspension, comprising:

- (a) about 0.1 to about 75 percent by weight guar gum;
- (b) about 55 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor wax.

28. The suspension according to claim 27 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

29. The suspension according to claim 27 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

30. The suspension according to claim 29 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

31. The suspension according to claim 27 wherein the polyalkylene glycol has a molecular weight of less than 1000.

32. The suspension according to claim 27 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

33. A non-aqueous suspension, comprising:

- (a) about 0.1 to about 50 percent by weight cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum;
- (b) about 55 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor wax.

34. The suspension according to claim 33 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

35. The suspension according to claim 33 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

36. The suspension according to claim 35 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

37. The suspension according to claim 33 wherein the polyalkylene glycol has a molecular weight of less than 1000.

38. The suspension according to claim 29 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

39. A composition comprising environmental chemical, agricultural chemical, paper chemical, textile chemical, construction or building product ingredient (such as paint, joint cement, textured finishing compound), cosmetic ingredients, hair spray, gelatin substitute, ceramic material, cleaning composition, polish, ink, fire-fighting chemical, metal-working chemical, adhesive chemical, explosive chemical, flocculent, water treatment compound, binder chemical for sand, ores or coal or oil field chemical which includes a non-aqueous suspension, comprising:

- (a) one or more water-soluble polymers;
- (b) polyalkylene glycol; and
- (c) a suspension stabilizer comprising an hydrogenated castor oil or wax.

40. The composition according to claim 39 wherein the water-soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

41. The composition according to claim 39 wherein the water-soluble polymer is xanthan gum.

42. The composition according to claim 39 wherein the water-soluble polymer is guar gum.

43. The composition according to claim 39 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.

44. The composition according to claim 39 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

45. The composition according to claim 39 wherein the polyalkylene glycol includes a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

46. The composition according to claim 45 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

47. The suspension according to claim 39 wherein the polyalkylene glycol has a molecular weight of less than 1000.

48. The composition according to claim 39 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

49. A composition of a polymer solution or dispersion comprising:

- (a) non-aqueous suspension from about 0.001 to about 10 percent by weight of the total weight, the non-aqueous suspension, comprising:
  - (i) one or more water-soluble polymers,
  - (ii) polyalkylene glycol, and
  - (iii) a suspension stabilizer comprising an hydrogenated castor oil or wax; and
- (b) water from about 90 to about 99.999 percent by weight of the total weight.

50. The composition of claim 49 wherein the non-aqueous suspension comprises from about 0.25% by weight to about 5% by weight of the polymer solution and water comprises the balance.

51. The composition of claim 49 wherein the polymer solution or dispersion is hydrated and subsequently crosslinked to form a gel with an aluminum, antimony, boron, titanium, or zirconium compound, complex, or chelate, or some combination aluminum, antimony, boron, titanium, and zirconium compounds, complexes, or chelates.

52. The composition of claim 49 wherein one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers are incorporated into the hydrated polymer solution or dispersion.

53. The composition of claim 49 wherein the water is seawater, or a solution of sodium chloride, potassium chloride, or ammonium chloride, or a mixture thereof, in water.

54. The composition of claim 49 wherein the non-aqueous suspension comprises:

- (a) about 0.1 to about 75 percent by weight water-soluble polymer;
- (b) about 20 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor oil or wax.

55. The suspension according to claim 54 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

56. The composition according to claim 49 wherein the water-soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

57. The composition according to claim 49 wherein the water-soluble polymer is xanthan gum.

58. The composition according to claim 49 wherein the water-soluble polymer is guar gum.

59. The composition according to claim 49 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.

60. The composition according to claim 49 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

61. The composition according to claim 49 wherein the polyalkylene glycol includes a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

62. The composition according to claim 61 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

63. The suspension according to claim 49 wherein the polyalkylene glycol has a molecular weight of less than 1000.

64. A composition of a polymer solution or dispersion comprising environmental chemical, agricultural chemical, paper chemical, textile chemical, construction or building product ingredient (such as paint, joint cement, textured finishing compound), cosmetic ingredients, hair spray, gelatin substitute, ceramic material, cleaning composition, polish, ink, fire-fighting chemical, metal-working chemical, adhesive chemical, explosive chemical, flocculent, water treatment compound, binder chemical for sand, ores or coal or oil field chemical which includes a non-aqueous suspension, comprising:

(a) non-aqueous suspension from about 0.001 to about 10 percent by weight of the total weight, the non-aqueous suspension, comprising:

(i) one or more water-soluble polymers,  
(ii) polyalkylene glycol, and  
(iii) a suspension stabilizer comprising an hydrogenated castor oil or wax; and

(b) water from about 90 to about 99.999 percent by weight of the total weight.

65. The composition of claim 64 wherein the non-aqueous suspension comprises:

- (a) about 0.1 to about 75 percent by weight water-soluble polymer;
- (b) about 20 to about 99.8 percent by weight polyethylene glycol; and
- (c) about 0.1 to about 5 percent by weight hydrogenated castor oil or wax.

66. The suspension according to claim 65 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

67. The composition according to claim 64 wherein the water-soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl

methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

68. The composition according to claim 64 wherein the water-soluble polymer is xanthan gum.

69. The composition according to claim 65 wherein the water-soluble polymer is guar gum.

70. The composition according to claim 65 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.

71. The composition according to claim 64 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

72. The composition according to claim 64 wherein the polyalkylene glycol includes a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

73. The composition according to claim 72 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

74. The suspension according to claim 64 wherein the polyalkylene glycol has a molecular weight of less than 1000.

75. The composition according to claim 64 further comprising one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

76. A method of formulating a non-aqueous suspension, comprising the steps of:  
dispersing one or more water soluble polymers and a hydrogenated castor oil or wax into  
polyalkylene glycol; and  
agitating the one or more water soluble polymers, the hydrogenated castor oil or wax, and  
the polyalkylene glycol until the one or more water soluble polymers are uniformly dispersed in  
the polyalkylene glycol and the hydrogenated castor wax dissolves.

77. The method according to claim 76 wherein the water soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinoglucans, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

78. The method according to claim 76 wherein the water-soluble polymer is xanthan gum.

79. The method according to claim 76 wherein the water-soluble polymer is guar gum.

80. The method according to claim 76 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.

81. The method according to claim 76 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

82. The method according to claim 76 wherein the polyalkylene glycol includes a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

84. The suspension according to claim 82 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

85. The suspension according to claim 76 wherein the polyalkylene glycol has a molecular weight of less than 1000.

85. The method according to claim 76 further comprising the step of dispersing one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

86. A method of formulating a non-aqueous suspension, comprising the steps of:  
dispersing from about 0.1 to 75% suspension weight of one or more water soluble polymers and from about 0.1 to 5.0% suspension weight of a hydrogenated castor oil or wax into from about 20 to 99.8% suspension weight of polyalkylene glycol; and  
agitating the one or more water soluble polymers, the hydrogenated castor oil or wax, and the polyalkylene glycol until the one or more water soluble polymers are uniformly dispersed in the polyalkylene glycol and the hydrogenated castor wax dissolves.

87. The method according to claim 86 wherein the water soluble polymer is selected from the group consisting of guar, hydroxyalkyl guar, carboxyalkyl guar, carboxyalkyl hydroxyalkyl guar, cationic guar, hydrophobically modified guar, hydrophobically modified hydroxyalkyl guar, hydrophobically modified carboxyalkyl guar, hydrophobically modified carboxyalkyl hydroxyalkyl guar, hydrophobically modified cationic guar, pectin, alginates, locust bean gum, gum arabic, gum acacia, carrageenan, hydroxyalkyl cellulose, carboxyalkyl hydroxyalkyl cellulose, carboxyalkyl cellulose, alkyl ethers of cellulose, hydroxyalkyl methyl cellulose, hydrophobically modified hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl hydroxyalkyl cellulose, hydrophobically modified carboxyalkyl cellulose, hydrophobically modified alkyl ethers of cellulose, hydrophobically modified hydroxyalkyl methyl cellulose, starch, gum tragacanth, gum karaya, tara gum, xanthan gum, welan gum, succinogluconic acid, polyvinyl alcohol, polyacrylates such as the Carbopol® type polyacrylamide.

88. The method according to claim 86 wherein the water-soluble polymer is xanthan gum.

89. The method according to claim 86 wherein the water-soluble polymer is guar gum.

90. The method according to claim 86 wherein the water-soluble polymer is cationic-, hydroxyalkyl-, carboxyalkyl-, or carboxyalkylhydroxyalkyl-derivatized guar gum.

91. The method according to claim 86 wherein the polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol, and mixtures thereof.

92. The method according to claim 86 wherein the polyalkylene glycol further comprises between about 0.1 and 2.0% by weight of the polyalkylene glycol of a thickener selected from the group consisting of partially neutralized polyacrylic acid, hydroxypropyl cellulose, highly substituted hydroxypropyl guar, hydrated thickening silica including fumed silica and hydrophobic fumed silica, their functional equivalents, and mixtures thereof.

93. The method according to claim 92 wherein the hydrated thickening silicas are selected from the group consisting of colloidal gel silicas and hydrophobic derivatives thereof.

94. The suspension according to claim 86 wherein the polyalkylene glycol has a molecular weight of less than 1000.

95. The method according to claim 86 further comprising the step of dispersing one or more of the following additive materials selected from the group consisting of acids, bases, buffers, surfactants, demulsifiers, non-emulsifiers, foaming agents, antifoaming agents, scale inhibitors, corrosion inhibitors, polymer preservatives, bactericides, antioxidants, fluid loss additives, water miscible co-solvents, formation clay stabilizers, crosslinkers, polymer breakers, and gel breakers.

96. A method of drilling and completing a well, treating a subterranean formation, or displacing hydrocarbons in a hydrocarbon bearing formation with a fluid comprising the steps of:

- (a) preparing a non-aqueous suspension, comprising:
  - (i) one or more water-soluble polymers,
  - (ii) polyalkylene glycol, and
  - (iii) a suspension stabilizer comprising an hydrogenated castor oil or wax;
- (b) dispersing the non-aqueous suspension in water, thereby forming a fluid; and
- (c) introducing the fluid into the well or subterranean formation.

97. The method according to claim 96 wherein the non-aqueous suspension comprises from about 0.001 to about 10 percent by weight of the total fluid weight.

98. The method according to claim 96 wherein the water comprises from about 90 to about 99.999 percent by weight of the total fluid weight.